**DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN PATENT APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)**

Title Of Invention: **COLUMN REDUNDANCY SCHEME FOR NON-VOLATILE FLASH MEMORY USING JTAG INPUT PROTOCOL** Docket No. **X-1173 US**

As a below named inventor(s), I/We declare that:

This declaration is directed to:

- ☒ The attached application, or
☒ Application No. 10/629,365 filed on July 29, 2003
☐ as amended (on) _____ (if applicable);

I/We believe I/We am/are the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought;

I/We have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment specifically referred to above;

I/We acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me/us to be material to patentability as defined in 37 CFR 1.56, including material information which became available while the application was pending in the United States Patent and Trademark Office; and

All statements made herein of my own knowledge are true, all statements made herein on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and may jeopardize the validity of the application or any patent issuing thereon.

FULL NAME OF INVENTOR(S)

Inventor One: Asim A. Bajwa Date 12/3/03

Signature: [Signature] Citizen of: United States

~~Inventor Two: Ping-Chen Liu Date _____~~

~~Signature: _____ Citizen of: Taiwan~~

Inventor Three: _____ Date _____

Signature: _____ Citizen of: _____

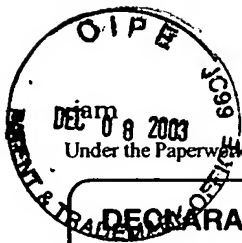
Inventor Four: _____ Date _____

Signature: _____ Citizen of: _____

☐ Additional inventors are being named on n/a additional form(s) attached hereto.

Burden Hour Statement: This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is used by the public to file (and the PTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This form is estimated to take 1 minute to complete. This time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

JL:jam

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X-1173 US

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FULL-NAME OF INVENTOR(S)Inventor One: Asim A. Bajwa Date _____Signature: _____ Citizen of: United StatesInventor Two: Ping-Chen Liu Date 7/28/03Signature: P. Chen Citizen of: Taiwan

Inventor Three: _____ Date _____

Signature: _____ Citizen of: _____

Inventor Four: _____ Date _____

Signature: _____ Citizen of: _____

☐ Additional inventors are being named on n/a additional form(s) attached hereto.

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